

Notice of Allowability

Application No.

10/502,068

Examiner

Eric W Thomas

Applicant(s)

MICHEL ET AL.

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2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the paper filed on 7/21/04.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 21 July 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



Eric Thomas
Patent Examiner
AU 2831

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

(Note to applicant: The abstract should be on a separate page)

Please replace the abstract with:

--An electrode includes a current collector that is two-dimensional in shape and that contains perforations, and an intermediate layer that is electrically conductive and substantially corrosion-resistant. The intermediate layer is on at least part of a first surface of the current collector, and includes at least one of precious metal, graphitic carbon, a metal nitride, and a metal carbide. A first electrode layer is on the intermediate layer. At least part of the first electrode layer is in at least some perforations of the current collector. The first electrode layer, the intermediate layer, and the current collector are bonded together.—

2. The following is an examiner's statement of reasons for allowance: The prior art does not teach or fairly suggest (taken in combination with the other claimed features) an electrode comprising a current collector that contains perforations and at least a part of the first electrode layer being in at least some perforations of the current collector (claims 1-10); a method for producing an electrode comprising producing an

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intermediate layer on a first surface of a current collector the intermediate layer being electrically conductive and corrosion resistant, the intermediate layer comprising at least one of a precious metal, graphitic carbon, a metal nitride, and a metal carbide; and producing an electrode layer on the intermediate layer (claims 11-21); an electrochemical double layer capacitor comprising at least one electrode comprising ~~an~~ a current collector that contains perforations and at least a part of the first electrode layer being in at least some perforations of the current collector (claim 22); a hybrid capacitor comprising a first electrode, wherein the first electrode a first current collector that contains perforations and at least a part of the first electrode layer being in at least some perforations of the first current collector (claim 23); and a pseudo-capacitor comprising at least one electrode that comprises a current collector that contains perforations and at least a part of the first electrode layer being in at least some perforations of the current collector (claim 24).

CT 11/29/24

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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2003/0112581 – discloses a current collector having an etched surface wherein an electrode is formed on the etched surface.

6,447,555 – discloses a double layer capacitor having carbon particles that are embedded in the surface of a current collector.

2002/0097550 – discloses a capacitor unit comprising a current collector having a roughened surface.

5,369,547 – discloses a capacitor comprising a cathode coating.

5,737,181 – discloses a capacitor comprising a cathode coating.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric W Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on M,Tu,Sat 9 am - 9:30 pm; W, Th, F 6 pm -10:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Eric W. Thomas", followed by a period.

Eric W Thomas
Examiner
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